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EXAMINER

DOYLE, J

ART UNIT

PAPER NUMBER

332

DATE MAILED:

8

07/10/91

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 4/18/91 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s) — days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.                 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474.     | 6. <input type="checkbox"/>   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-26 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☒ Claims 27-42 have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-26 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☒ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_; Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1835 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

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The election of Group I, claims 1-26 and applicant's cancellation of non-elected claims 27-42 is acknowledged.

Claim 8 is objected to under 37 C.F.R. § 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See M.P.E.P. § 608.01(n). Accordingly, claim 8 has not been further treated on the merits.

Claims 4-6, 17, 20, 21 and 23-26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, what exactly is meant by "permanent portion"? The scope of that term is not clear.

In claim 5, "the permanent portion" lacks antecedent basis. Note that claim 5 depends from claims 1, not claim 4, where the "permanent portion" is first recited.

Claims 6, 17 and 20 are written in the form of a method step. An article cannot comprise a method step.

Claims 25 and 26 do not make sense. The claims are inaccurate, because the mouthpiece and dispenser are not part of the cartridge, as indicated by claims 25 and 26. Claims 25 and 26 should apparently be written in a form such as --The cartridge of claim 12 (13) in combination with a mouthpiece (and/or

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dispenser), the mouthpiece (and/or dispenser) comprising: . .--.

Further, in claim 25, line 8, is "a cartridge" different from "the cartridge" of claim 12? Also, is the "cartridge" in line 8 the same "cartridge" referred to in line 9? Clarification is required. Further, in line 10, "passageway" should apparently be --passageway section--. Further, "said other end of the mouthpiece" lacks antecedent basis.

Claim 23, as written, is in the form of a method step. It appears that "in", in line 3, should be --with--. For purposes of prior art considerations in this action, the claim is interpreted as having --with-- in line 3.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 12-14, 18, 20 and 25 are rejected under 35 U.S.C. § 102(b) as being anticipated by Bartolomeo (US 2,860,638).

Bartolomeo discloses a nicotine inhaler comprising a cartridge (14) including a housing made of aluminum, a nicotine carrier (filler material soaked with nicotine inside the housing,

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and a mouthpiece having a first end (10) defining a passageway and adapted to be received in the user's mouth and a second end (12) including a sharpened end (17) for penetrating one of the rupturable end portions (14x). The end portions (14x) of the cartridge housing, as well as the sidewalls (permanent portions - not to be punctured) of the housing, are disclosed as being a thin layer of aluminum (i.e. - aluminum foil).

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 2, 3, 15 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Bartolomeo in view of Ray et al.

(4,800,903).

Bartolomeo discloses a plug made of cotton or mineral matter

saturated with nicotine. Ray et al. teaches a more modern alternative equivalent nicotine plug comprising a nicotine-saturated polyethylene plug. It would have been obvious to one of ordinary skill in the art to replace the cotton plug of Bartolomeo with a polyethylene plug as taught by Ray et al., as this would merely involve an obvious update in technology.

Claims 6, 7, 19 and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over Bartolomeo in view of Oldham et al. (4,736,755) and The Condensed Chemical Dictionary and Hayes et al. (4,265,948).

Bartolomeo teaches that the capsule (14) must be hermetically sealed from the atmosphere (col. 2, lines 23-27) and also teaches that the nicotine is a volatile substance. Further, Oldham et al. and The Condensed Chemical Dictionary both teach that nicotine reacts with oxygen.

Hayes et al. teach the use of a layer of aluminum foil laminated with acrylonitrile and methyl acrylate for packaging of volatile products to protect the packaging from deterioration from reaction with the volatiles. Hayes et al. further teach that such packaging is impermeable to oxygen and moisture, thus protecting the contents.

Given the known properties of nicotine, it would have been obvious to one of ordinary skill in the art to include the

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laminated foil housing taught by Hayes et al. in the cartridge housing of Bartolomeo to preserve both the nicotine and the cartridge housing.

Claim 26 is rejected under 35 U.S.C. § 103 as being unpatentable over Bartolomeo in view of Steiner (Des. 112,952).

Bartolomeo discloses a nicotine inhaler comprising a mouthpiece for use with disposable nicotine cartridges, as discussed above. Although Bartolomeo does not disclose any container for storing such cartridges before use with the mouthpiece, it would have been obvious to provide a container for holding a plurality of such cartridges. Steiner discloses a folding smoking article tray having a plurality of parallel slots for holding smoking articles which are suitable for holding cartridges such as those of Bartolomeo. Given the shape of the Bartolomeo cartridges and the shape of the slots of Steiner, it would have been obvious to one using the Bartolomeo mouthpiece and cartridges, in the absence of the suggestion of any particular container by Bartolomeo, to look to the teachings of a tray such as that taught by Steiner for a suitable container for the extra cartridges. As to the sharpened tip, note the sharp edge at the hinge of the Steiner tray is capable of puncturing one end of a cartridge of Bartolomeo.

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Claims 9-11 and 22-24 are rejected under 35 U.S.C. § 103 as being unpatentable over Bartolomeo in view of Wetterlin (4,137,914).

As shown, for example, by Wetterlin, nitrogen gas is a commonly used propellant in aerosol inhalers. Wetterlin specifically teaches filling a capsule containing a dose of medication with nitrogen gas. When the capsule is pierced, the medication is inhaled by the user, assisted by the nitrogen propellant. It would have been obvious to apply the teachings of Wetterlin to the Bartolomeo device by filling the capsule with a nitrogen gas propellant, as both devices are directed toward inhalers for delivering a drug to a user. As to the interior of the capsule being oxygen-free, Wetterlin does not mention the presence of any other gas besides the nitrogen being present in the capsule.

Any inquiry concerning this communication should be directed to Jennifer Doyle at telephone number (703) 308-0858.

*JD 6/30/91*

JD  
June 30, 1991

*V. Miller*  
*V. Miller*  
*Primary Examiner*